Please amend claims 34-36. This listing of claims will replace all prior versions and listings of claims in the application.

CLAIMS

What is claimed is:

- 1-33. (canceled)
- 34. (currently amended) A method for screening for genes whose expression is altered by disease, age, or exogenous agent, comprising:

screening a sample microarray comprising genes from a library, cells or animal exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under control of the same regulatory element, which regulatory element contains defined nucleotide bases to which an enhancer or a repressor may bind; and

comparing the expression of the genes to expression of control genes from a library, cells or animal not exposed to the disease, age or exogenous agent; and

identifying genes whose expression is altered by the disease, age or exogenous agent.

- 35. (currently amended) A method for screening for genes whose expression is altered by disease, age, or exogenous agent, comprising:
- screening a sample microarray comprising genes from a library, cells or animal exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under control of the same regulatory element; and

comparing the expression of the genes to expression of control genes from a library,

cells or animal not exposed to the disease, age or exogenous agent; and

 $\underline{identifying\ genes\ whose\ expression\ is\ altered\ by\ the\ disease,\ age\ or\ exogenous\ agent;}$

wherein the microarray further comprises other control genes that are not under the

control of the same regulatory element.

(currently amended) A method for screening for genes whose expression is altered by

disease, age, or exogenous agent, comprising:

screening a sample microarray comprising genes from a library, cells or animal

exposed to the disease, age or exogenous agent, wherein expression of all of the genes is under

control of the same regulatory element; and

comparing the expression of the genes to expression of control genes from a library,

cells or animal not exposed to the disease, age or exogenous agent; and

identifying genes whose expression is altered by the disease, age or exogenous agent;

wherein the regulatory element is selected from the group of regulatory elements

consisting of osmotic response element, retinoic acid response element, conserved proximal

sequence element, vitamin D response element, sterol response element, TNF-alpha response

element, serum response element, cAMP response element, antioxidant response element,

glucotocorticoid modulatory element, gonadotropin-releasing hormone-response element,

pheromone response element, insulin response element, interferon consensus response element,

estrogen response element, hypoxia response element, E2F transcription factor, xenobiotic response

element, endoplasmic reticulum stress response element, iron-response element, androgen response

element, stress response element, RAS-responsive element binding protein 1, and transforming

growth factor, beta-1 response element.

37. (canceled)

38. (original) The method of claim 34 wherein the disease is selected from the group

consisting of neurological disorders, cardiovascular disorders, bone and muscle disorders, blood or

circulation related disorders, and cancer.

39. (original) The method of claim 38 wherein the diseases are selected from the group

consisting of Alzheimer's disease, Parkinson's disease, Huntington's disease, myocardial

hypertrophy, atherosclerosis, myocardial infarction, osteoarthritis, osteoporosis, and autoimmune

disorders.

40. (original) The method of claim 38 wherein the cancers are selected from the group

consisting of breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer, chronic

lymphocytic leukemia, acute lymphocytic leukemia, brain tumors, pancreatic cancer, and

heptatomas.

41. (canceled)

42. (previously presented) The method of claim 34 wherein the exogenous agent is a drug

or toxin.

43. (previously presented) The method of claim 34 wherein the library is derived from

cells or tissues treated with one or more compounds in vitro.

44. (previously presented) The method of claim 34 wherein the library is derived from

cells obtained from an individual of a particular age, having a particular disease or disorder, or

derived from the neurological system, the cardiovascular system, the musculoskeletal system, or

cancerous tissues.

45. (previously presented) The method of claim 34 wherein the exogenous agent is

selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid

molecules, and synthetic molecules.

46. (previously presented) The method of claim 43 wherein the compound is selected

from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules,

and synthetic molecules.

47. (previously presented) The method of claim 35 wherein the disease is selected from

the group consisting of neurological disorders, cardiovascular disorders, bone and muscle disorders.

blood or circulation related disorders, and cancer.

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48. (previously presented) The method of claim 47 wherein the diseases are selected from

the group consisting of Alzheimer's disease, Parkinson's disease, Huntington's disease, myocardial

hypertrophy, atherosclerosis, myocardial infarction, osteoarthritis, osteoporosis, and autoimmune

disorders.

49. (previously presented) The method of claim 47 wherein the cancers are selected from

the group consisting of breast cancer, prostatic hypertrophy, prostatic cancer, colon cancer, chronic

lymphocytic leukemia, acute lymphocytic leukemia, brain tumors, pancreatic cancer, and

heptatomas.

50. (previously presented) The method of claim 35 wherein the exogenous agent is a

drug or toxin.

51. (previously presented) The method of claim 35 wherein the library is derived from

cells or tissues treated with one or more compounds in vitro.

52. (previously presented) The method of claim 35 wherein the library is derived from

cells obtained from an individual of a particular age, having a particular disease or disorder, or

derived from the neurological system, the cardiovascular system, the musculoskeletal system, or

cancerous tissues.

53. (previously presented) The method of claim 35 wherein the exogenous agent is

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selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.

54. (previously presented) The method of claim 35 wherein the compound is selected from the group consisting of proteins or peptides, sugars or polysaccharides, nucleic acid molecules, and synthetic molecules.